

**Shlomo Gelaki**

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will speak on

**Fusion categories with applications to  
semisimple Hopf algebras**

ABSTRACT: I will motivate the definition of a Hopf algebra (quantum group), describe the structure of its representation category and explain that in the semisimple case one obtains a fusion category. I will then present some results on fusion categories and discuss their implications on the structure and classification of semisimple Hopf algebras (e.g. Lagrange's theorem, semisimple Hopf algebras of various dimensions, triangular semisimple Hopf algebras, and more as time permits).

MONDAY, OCTOBER 9, 2006

LECTURE AT 4:00 PM (#)

COFFEE, TEA, AND REFRESHMENTS FROM 3-5 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS